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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,968	10/19/2005	Tomoori Odaka	743421-83	9990

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NIXON PEABODY, LLP
401 9TH STREET, NW
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WASHINGTON, DC 20004-2128

EXAMINER

SHEEHAN, JOHN P

ART UNIT	PAPER NUMBER
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1742

MAIL DATE	DELIVERY MODE
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06/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/553,968	Applicant(s) ODAKA ET AL.	
	Examiner John P. Sheehan	Art Unit 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/19/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 to 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takebuchi et al. (Takebuchi, US Patent No. 5,595,608, cited by the Examiner in this Office action).

Takebuchi teaches a method of making a rare earth sintered permanent magnet. Takebuchi teaches that the magnet has a main phase having a composition represented by the $R_2T_{14}B$ (column 3, line 11). Takebuchi's disclosed method comprises preparing a rare earth main phase alloy by rapidly cooling a melt of the alloy (column 3, lines 31 to 37) having a composition that encompasses the first rare-earth alloy composition recited in the instant claims 1 to 13 (column 3, lines 23 to 24). The rapidly quenched main phase alloy has a columnar crystal grain structure having a

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mean grain size of 3 to 50 microns (column 3, lines 18 to 20) that encompasses the particle size recited in applicants' claim 3. Takebuchi's discloses preparing a rare earth grain boundary phase alloy by rapidly cooling a melt of the alloy (column 3, lines 38 to 46) having a composition that encompasses the second rare-earth alloy composition recited in the instant claims 1 to 13 (column 3, lines 22 to 27). The rapidly quenched grain boundary phase alloy has a crystal grain structure having a mean grain size of 0.1 to 20 microns (column 3, lines 38 to 42) that encompasses the particle size recited in applicants' claim 4. Thus, Takebuchi encompasses an embodiment wherein the first rare earth powder has a dendritic size that is larger than that of the second rare earth powder as recited in the instant claims. Takebuchi teaches that the two alloys can be ground separately or as a mixture (column 3, line 47 to column 4, lines 6) but should have a particle size of 1 to 10 microns (column 3, line 41) as recited in applicants' claims 5 and 6. Takebuchi teaches that the powder mixture comprises 60 to 95 wt% of the primary phase alloy and 5 to 40 wt% of the grain boundary phase (column 3, lines 13 to 16) as recited in applicants' claim 7. The blended powder is compacted and sintered as recited in applicants' claim 13 (column 3, lines 15 to 20).

The claimed method and Takebuchi's method differ in that, although Takebuchi's disclosure encompasses the embodiment wherein the first rare earth powder has a dendritic size that is larger than that of the second rare earth powder as recited in the instant claims, Takebuchi does not require that the first rare earth powder have a dendritic crystal size that is larger than that second rare earth powder.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because Takebuchi 's disclosed method, while not limited to an embodiment wherein the first rare earth powder has a dendritic size that is larger than that of the second rare earth powder as recited in the instant claims, Takebuchi's disclosure does encompass such an embodiment. It would be obvious to one of skill in the art to choose any embodiment encompassed by Takebuchi's disclosure including the embodiment wherein the first rare earth powder has a dendritic size that is larger than that of the second rare earth powder as recited in the instant claims. A prima facie case of obviousness exists when the claimed invention overlaps the disclosed prior art In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

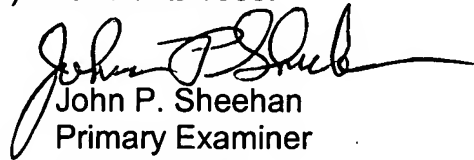
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (571) 272-1249. The examiner can normally be reached on T-F (6:45-4:30) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


John P. Sheehan
Primary Examiner
Art Unit 1742

Jps